

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P272123

Luminaire Tested: **24CZ2-75HE-UNV-L940-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272123
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-UNV-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (392) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6468.0 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

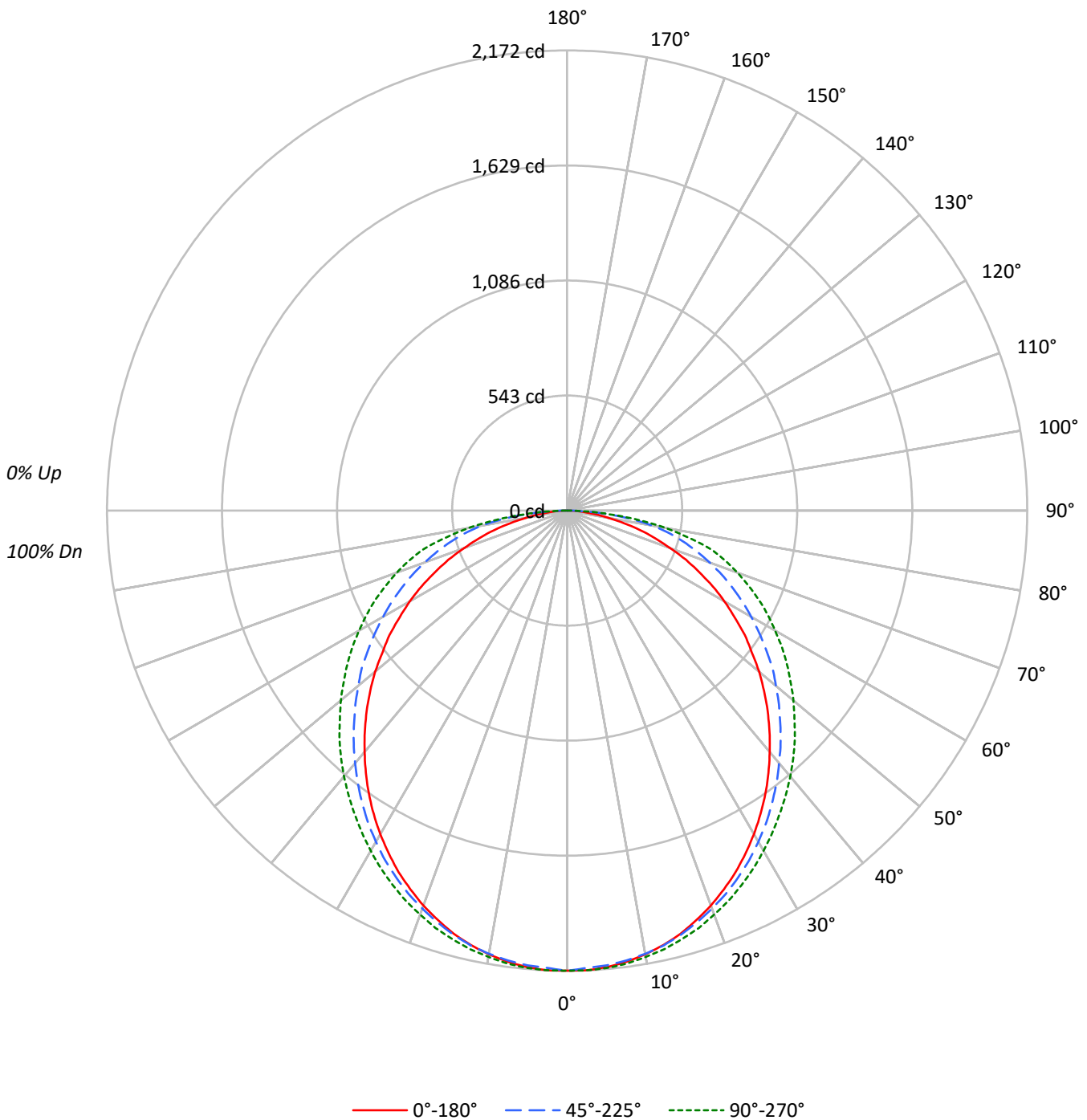
Input Watts (W): 55.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56					56			
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2922	2922	2922
5°	2921	2910	2927
10°	2905	2902	2923
15°	2881	2887	2917
20°	2840	2862	2905
25°	2794	2836	2894
30°	2740	2804	2881
35°	2680	2769	2872
40°	2612	2734	2878
45°	2547	2707	2892
50°	2476	2693	2919
55°	2400	2689	2972
60°	2306	2701	3050
65°	2186	2742	3182
70°	2030	2811	3363
75°	1852	2951	3647
80°	1522	3178	3646
85°	1167	2933	3132



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.4	3.2
10°-20°	586.3	9.1
20°-30°	882.4	13.6
30°-40°	1057.4	16.3
40°-50°	1101.9	17.0
50°-60°	1025.2	15.9
60°-70°	844.4	13.1
70°-80°	575.1	8.9
80°-90°	189.9	2.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1674.1	25.9
0°-40°	2731.5	42.2
0°-60°	4858.7	75.1
0°-90°	6468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6468.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2172	2172	2172	2172	2172	
5°	2163	2163	2154	2165	2167	205
15°	2068	2070	2072	2092	2094	583
25°	1882	1891	1910	1943	1949	867
35°	1632	1651	1686	1731	1748	1020
45°	1338	1366	1423	1494	1520	1032
55°	1023	1058	1146	1237	1267	912
65°	686	745	861	963	1000	681
75°	356	436	568	669	702	376
85°	76	147	190	203	203	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2171.6	2171.6	2171.6	2171.6	2171.6
2.5°	2171.6	2171.6	2160.8	2171.6	2171.6
5°	2163.0	2163.0	2154.3	2165.1	2167.3
7.5°	2147.9	2150.0	2141.4	2154.3	2156.5
10°	2126.3	2128.4	2124.1	2137.1	2139.2
12.5°	2100.4	2102.5	2102.5	2117.6	2119.8
15°	2068.0	2070.2	2072.3	2091.7	2093.9
17.5°	2027.0	2033.5	2037.8	2061.5	2065.8
20°	1983.8	1990.3	1998.9	2024.8	2029.1
22.5°	1934.2	1942.8	1957.9	1986.0	1992.4
25°	1882.3	1891.0	1910.4	1942.8	1949.3
27.5°	1824.1	1837.0	1860.8	1895.3	1903.9
30°	1763.6	1776.6	1804.6	1841.3	1854.3
32.5°	1698.9	1716.1	1748.5	1789.5	1802.5
35°	1631.9	1651.4	1685.9	1731.2	1748.5
37.5°	1560.7	1582.3	1623.3	1673.0	1694.5
40°	1487.3	1513.2	1556.4	1614.7	1638.4
42.5°	1413.9	1437.7	1491.6	1554.2	1580.1
45°	1338.4	1366.4	1422.6	1493.8	1519.7
47.5°	1260.7	1288.7	1355.6	1431.2	1454.9
50°	1182.9	1211.0	1286.6	1366.4	1394.5
52.5°	1098.8	1135.5	1221.8	1301.7	1329.7
55°	1023.2	1057.7	1146.2	1236.9	1267.1
57.5°	936.9	977.9	1075.0	1170.0	1202.4
60°	857.0	900.2	1003.8	1100.9	1133.3
62.5°	775.0	822.4	932.5	1031.8	1068.5
65°	686.5	744.7	861.3	962.8	999.5
67.5°	606.6	667.0	790.1	893.7	926.1
70°	515.9	589.3	714.5	818.1	854.8
72.5°	438.2	511.6	643.3	744.7	781.4
75°	356.2	436.0	567.7	669.2	701.6
77.5°	274.1	362.7	494.3	572.0	582.8
80°	196.4	289.3	410.1	455.5	470.6
82.5°	138.2	222.3	302.2	332.4	341.1
85°	75.6	146.8	190.0	202.9	202.9
87.5°	32.4	62.6	75.6	77.7	79.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)